

# Higher Education in Brazil

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## 1. Higher Education and Society

### *Origins*

Brazilian institutions of higher education were, from the beginning, part of a peculiar project of modernization from above beginning in Portugal at the end of the 18th Century, transplanted to Brazil with the Portuguese Court in 1808 and continued after political autonomy in 1822. It was led by Sebastião José de Carvalho Melo, the Marquis of Pombal, Minister of King D. José I from 1750 to 1777, known for the expulsion of the Jesuits from the Portuguese empire and the renovation of the traditional Universidade de Coimbra in Lisbon.

Pombal hoped to free Portugal from the grips of Catholic restoration and conservatism, allowing it to share the benefits of the spreading scientific and industrial revolution, without, however, incorporating new sectors in the ruling circles, or any major change in society or the economy. The Portuguese experience should be contrasted with that of other Western European countries, where evolution of higher education was part of a much broader process of social and political modernization, mediated by different sorts of new professional groups -- lawyers, the military, engineers, university professors, scientists -- responsible for the progressive rationalization and institutionalization of the new social order. Portugal and Spain, did not participate in the great religious and cultural transformations marking the end of the European middle ages, and never developed the strong professional, academic or religious corporations and movements that were present in different degrees in societies like Britain, France or the German states.

Brazilian enlightened elites, like their counterparts elsewhere in Latin America, entered the independence years of the early 19th century admiring and copying the French opposition to all forms of corporatist arrangements and privileges, including those of the Church and of the traditional universities. Once free from colonial rule, different versions of the Napoleonic system of higher education were created, taking away from the Church most of its role of elite education. When, in Brazil, the first professional schools were established in 1808, they were

meant to prepare cadres for public administration -- the military forces, the engineering corps, the hospitals and the handling of legal affairs -- but lacked professional and scholarly traditions upon which the modernization of Western university systems took place. They also lacked the pressures for performance and competence that would be required in conditions of intense competition for social mobility. Latin American enlightened elites could speak French, to travel to Europe and to handle French concepts, including the democratic and rationalist ideals; their societies, however, remained restricted to the limits of their economies, based on a few export products, large pockets of traditional or decadent settlements, one or two major administrative and export centers, and, in Brazil, a slave system lasting almost to the end of the 19th Century. This double jeopardy led to the generalized lack of intellectual and institutional vigor typical of most of scientific and higher education institutions in the region throughout the 19th century.

The first higher education institutions were established in Rio de Janeiro (military engineering, medicine), Salvador (medicine), Recife and São Paulo (law). After 1850, under Emperor D. Pedro II, Brazil entered a long period of political stability and economic growth, which allowed for the gradual expansion of its educational institutions and the consolidation of a few scientific centers, like the National Observatory, the National Museum and the Imperial Geological Commission. At the end of the 19th century, following the expansion of coffee plantations and the arrival of several million of European immigrants to the Brazilian southern states, the old Imperial regime was replaced by a federated republic, and dozens of "faculties," as well as a few new research institutions, were created in the State of São Paulo and in other regions. Brazil's first university, however, the Universidade do Rio de Janeiro, was inaugurated only in 1920 by the Federal Government, as a loose federation of previously existing professional schools.

The current institutional and intellectual framework of contemporary Brazilian educational institutions was established in the 1930's, with a major overhaul in 1968. The Getúlio Vargas period, from 1930 to 1945, was a time of growing political and administrative centralization, culminating in the fascist *putsch* of 1937. Italy, and the 1923 Giovanni Gentile education reforms, were permanent sources of inspiration, both for the reform of secondary education and the organization of universities, all under close ministerial supervision. In 1931 the new government established a Ministry of Education and Health, and legislation was introduced defining the framework for the country's university system, which was to combine a faculty of philosophy, sciences and letters, in charge of basic research and teacher education, with independent professional schools in law, medicine, engineering, pharmacy and others. The curricula for all careers were to be defined by law and to be mandatory for all; a National

Council of Education was to supervise and give stability to educational policies. In 1934 the Vargas regime sealed a political pact with the conservative Catholic Church, granting it control of education policy and institutions. In 1939 the Universidade do Rio de Janeiro was reorganized along the 1931 legislation, with the creation of its Faculdade de Filosofia, to be led by Catholic intellectuals, and a new name, Universidade do Brasil; it was supposed to provide the model for all other higher education institutions in the country.

The political and economic elites in the state of São Paulo, already the country's economic hub, maneuvered to keep their autonomy from the center, and in 1934 had created their own university, the first to follow the letter of the 1931 legislation, but under local control. Its Faculdade de Filosofia, fully staffed with European academics, became Brazil's first university institution to carry on research as a permanent and recognized activity and to grant advanced degrees.

Political centralization, authoritarianism and enthusiasm with European fascism receded in the early forties, after Brazil joined the allies in the Second World War. However, the centralizing and bureaucratic tendencies of the 1930's would remain in the years to follow, less for ideological choice than for institutional inertia. A network of federal universities developed after 1945, in large part through federalization of several state universities created in the thirties and forties, and later by the notion that each state in the federation was entitled to at least one federal university. The state of São Paulo kept its tradition of regional independence and self-sufficiency, and developed its own system of public higher education. The Church and State pact of 1934 left its imprinting, but receded with political liberalization, and the early forties saw the establishment of the Pontifical Catholic University in Rio de Janeiro, the first of a series. Isolated schools continued to be created both privately and by the federal, state and local governments in the following years, leading to the current de facto diversification of Brazilian higher education: a network of federal universities, a large state system in São Paulo, other smaller state and local institutions in other regions. Growing demands for higher education since the late sixties led to limited growth in the public sector and a rapid and uncontrolled expansion of private institutions, which accounts, in the late 1980's, for more than 70% of a total enrolment of about 1.5 million students, against 30% in a total of about 300 thousand in the mid sixties.

**Table 1: Brazilian Higher Education, 1960-1986: Openings, enrollment and graduation (thousands)**

	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1986</b>
<b>Openings</b>	35.4	145.0	404.8	442.3
<b>Enrollment</b>	93.2	425.5	1,377	1,418
<b>Conclusions</b>	16.9	64.0	223	234

Source: Gusso and others, table V.1, p. 239. Data from Serviço de Estatística da Educação e Cultura do Ministério da Educação, Brasília.

### *Social and Economic Context*

Higher education in Brazil was traditionally a channel of elite education and reproduction, within a highly stratified, regionally unbalanced and unequally developed society. As the educational institutions begun to expand, access to culture and expert knowledge provided new grounds for claims to social and political leadership, which changed in character as the number and social origins of the student body also evolved. In Brazil, as elsewhere in Latin America, political activism has been a permanent feature of university life. Political leadership, social mobility and, more recently, professional credentials and job security, have frequently overshadowed the acquisition of professional skills required by the job market as the main motivations for higher education.

Only about a third of the country's one hundred and fifty million inhabitants can be said to participate in some degree in the organized and modern sector of society, in terms of consumption, employment, living conditions and access to education. In the past, most people lived in the countryside; today, more than 70% are urban, leading to serious problems of housing, transportation, overcrowding, violence and other manifestations of social marginality in large urban centers. Modern industry is concentrated in São Paulo and other southern states; large, capital-intensive rural enterprises dominate extensive parts of the land, including some of the largest frontier and demographically rarified states. The occupational structure is predominantly urban (70%). The densely populated Northeastern states, dominated since the 17th century by sugar cane plantations and industry, have remained in a state of chronic misery for centuries, and are a source of steady population migration to the southern and urban regions.

Population growth was extremely high between 1940 and 1960, when it grew from 41.2 to 70.1 million, or 70%; the 1980 census registered 119 million, a similar increase rate. In the eighties,

however, birth rates have dropped dramatically while earlier increases in life expectation have leveled off, leading to downward estimations in population growth for the next decades. The high rates of rural-urban migration in the last decades seem to have also passed their peak; today the fastest growing regions are the frontier areas and middle-range cities, and there are already signs of migration from the largest metropolitan areas to smaller ones.

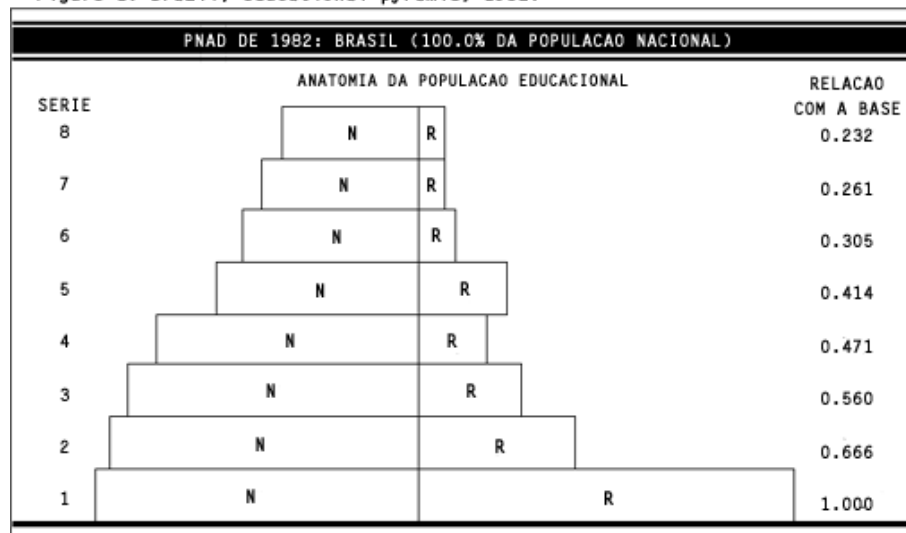
Ethnic differences are also apparent. Brazilian blacks are everywhere at the bottom of the social pyramid, in terms of education, employment and wealth. The Indian population that existed in the colonial period was either decimated or fully assimilated, except for small pockets of a few hundred thousands in some areas, and remain in fact outside society. There is only one spoken language, Portuguese, but socially unrecognized linguistic differences do exist not only among regions, but mostly among social strata, a condition presumably accounting for serious learning difficulties of lower class students in public schools. Italian, German and Japanese immigrants were forced to close their schools in the 1930's, and it is still forbidden in Brazil to provide basic education except in Portuguese. A few private foreign schools provide education in the main cities. There are no higher education institutions, however, organized along linguistic, ethnic or cultural lines.

There are no major religious cleavages in Brazil. When asked, most Brazilians declare themselves Catholic. Yet, Catholicism coexists with different forms of African and spiritualist cults, and some forms of Protestant fundamentalism have made substantial inroads among the poorer strata. The Catholic Church has traditionally been very active in educational matters, and still runs about a dozen universities in the country, and many secondary and fundamental schools. There are also a few protestant higher education institutions, but none related with the afro-Brazilian religions.

Brazil is formally a federation of states, further divided in thousands of municipalities and local districts. Political and economic power have usually remained in the hands of the central government, a tradition of central dominance that has been only challenged in the São Paulo region and, on occasion, in a few other places. The 1988 Constitution leaned toward decentralization, a process that has still to take place. Public subsidies, public employment and special access to privileged business opportunities are still the main source of living for the upper strata of the country's poorer or economic decadent regions, and not only there; economic transfers to the poorer sectors, however, have not been significant, for lack of motivation, administrative competence or sheer lack of resources. The educational system closely reflects this picture. Although access to first year, public basic education is now generally available

except in the poorest areas, the quality of educational services is very unequal. Repetition and dropout rates are extremely high, and strongly correlated with socioeconomic conditions. The average number of years of schooling for Brazil as whole was as low as 5.12 years in 1982; in rural areas it was 3.17, and in the Northeastern region, 3.8. Given the extreme variations in terms of quality, the number of functionally illiterates in the country, although unknown, is probably very high. Instead of investing in the solution of this problem, Brazilian society has moved toward the expansion of higher educational levels, leading to an increasing gap in the country's educational inequalities. Secondary education today is mostly provided by private institutions, and is only accessible to children of middle or higher income families who can pay and remain in good schools until age 15. To attend one a good private school is a necessary condition for passing in the entrance examinations for access to the public universities, which are usually the best, and free of charge. The alternative, for those who are not admitted, are the private institutions, where one has to pay for a lower quality education.

Figure 1. Brazil, educational pyramid, 1982.



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## 2. The Institutional of the Higher Education System

Brazilian higher education is formally unified along two lines, one, more traditional, related to the public regulation of professions, and the other, more modern, oriented toward the organization of knowledge in academic disciplines. These two unifying principles are not

recognized as different, and their uneasy coexistence helps to understand the deep contradictions, differentiation and contrasts among higher education institutions that occur in practice.

The 1931 university legislation reinforced the traditional Napoleonic notion that higher education institutions were schools licensed by the state to teach and certify for the established professions. Each teaching institution was a "faculdade," in the sense that they were granted the faculty, or franchise, to act in the state's behalf in providing education and extending legally binding professional credentials. This franchising system worked both for public and private institutions, leading to several important consequences. Since all units had to provide the same education, there was little room for academic autonomy. Educational credentials acquired a value that was fairly independent from their knowledge content, increasing the demand for formal education with an incentive to do it as easily and cheaply as possible. Carriers of diplomas in new fields of knowledge and education, like economics, journalism or administration, lobbied to create their own franchises, and therefore brought their courses under the same principle of national uniformity and federal regulation; there was no place nor incentives for research or non-professional degrees; and no role, except a ceremonial or a purely bureaucratic one, for a unified university authority and administration.

An elaborate system was set in place to keep this system under control. Each profession was to be controlled by professional councils, elected by their peers under ministerial supervision, and responsible for keeping the standards of the profession, protecting the market against uncertified persons, and helping to draft the mandatory basic curricula for the schools. All institutions were supposed to provide the same core curricula, with freedom to add options and special emphasis. In fact, given the link between courses taken and professional privileges, the mandatory curricula ended often occupying the whole four or five years of study for each profession. This complex system was to be further controlled by a Federal Council of Education and its state counterparts, which were supposed to authorize the establishment of new institutions and care for their quality and reliability. This system generated a large bureaucratic paraphernalia of rules and regulations to be followed by the schools, from elaborate degree registration procedures to admission procedures and faculty hiring and promotion practices, all inspected by the Ministry of Education and supervised by the education and professional councils. The public universities, as part of the civil service system, were also subject to the administrative and financial regulations emanating from the central administration and the government's accounting offices. Most of this control, however, dealt with formalities. In practice, once an institution received authorization to teach, it would almost never be revoked, and the basic equivalence of skills to be provided by the dif-

ferent schools throughout the country was never achieved. Moreover, as the higher education system expanded, differences in quality tended to increase, and to become publicly recognized.

A 1968 Reform bill sought to reorganize the traditional Napoleonic system along the North American model, centered on academically defined departments geared toward research and graduate education. The traditional chair system, led by prestigious part-time lawyers, medical doctors and engineers, was to be replaced by full-time researchers organized in departments and research institutes. A two-year, college-like "basic cycle" was to precede professional education in all careers. The traditional course sequences were replaced by the credit system, for greater flexibility of course choices. The students were supposed to fulfill the educational requirements for their professional careers by picking their credits among the different departments; the careers were supposed to be coordinated by interdepartmental committees, with the disappearance of the traditional "faculdades"; isolated and independent professional schools were supposed to disappear or to get together into university structures along the new frame. This whole conception was to be helped by the building of integrated campuses in the outskirts of Brazil's main cities, which were to replace the old faculties' buildings that existed scattered in downtown areas. This Reform faced from the beginning at least three serious obstacles: the overall political climate in which it was carried on, the explosion of demand for higher education and the resistance of the traditional "faculdades."

The year of 1968 was almost everywhere a time of political mobilization and youth protest, which in Brazil took the shape of huge student demonstrations against the military government that had seized power in 1964. Repression followed, and between 1969 and the mid seventies urban guerrillas clashed with the military, in a climate of political repression and fear that was particularly hard on the academic institutions. The implementation of a university reform law in such a context could only be perceived as part of the governments' repression against the students and the liberal academic community, and be taken with suspicion. That the innovations introduced by the reform had been taken from the North American system only contributed to this perception. Nevertheless, the placement of research at the core of the universities, the end of the chair system and the establishment of graduate studies had been central to the aspirations of many who now faced confrontation with the military authorities.

More serious, on long term, was that the 1968 reformers failed to predict the explosion of demand for higher education was already taking place in Brazil as well as elsewhere in Latin America and the Western world. This expansion was, in part, a consequence of the increase of students coming out of the secondary schools, which had increased their coverage in the previous



years. But it was also caused by new segments of the population suddenly aspiring to higher education: women, older people already employed, holders of secondary degrees in search of an upgrade in their academic credentials. Admittance to Brazilian universities has been always done through entrance examinations, and in 1968 the large number of candidates left out of the system for lack of places became a political embarrassment for the government, which decided to increase the number of openings in the universities, but also to allow for the creation of many private and isolated "faculdades." These new institutions were mostly low-cost teaching schools staffed with part-time and not well qualified professors, working mostly in the evenings, and catering to students that could not meet the university's entrance requirements, usually because of the low quality of their secondary education. Thus, while the Reform postulated a gradual convergence of higher education toward a unified university model, it started at once to diverge into a strongly stratified system, with free, more prestigious and usually better public sector at the top and an extended, low quality and paid private system at the bottom.

**Table 2: Enrollments in Brazilian Higher Education, 1987.**

	<b>Public</b>	<b>Private</b>	<b>Total</b>
<b>North</b>	27,942	9,123	37,065
<b>Northeast</b>	168,498	76,893	237,391
<b>Center-West</b>	35,390	45,939	81,329
<b>Southwest</b>	223,769	564,263	788,032
<b>South</b>	130,033	144,346	274,379
<b>Total</b>	<b>577,632</b>	<b>840,564</b>	<b>1,418,196</b>

**Source:** Gusso and others, table V.6, p. 242. Data from Serviço de Estatística da Educação e Cultura do Ministério da Educação, Brasília, prepared by Marli. I. S. Pinto.

The traditional faculties of law, medicine, engineering, dentistry and a few others were fairly successful in resisting the new legislation within the universities. They often kept their old buildings downtown, never moving to the new campuses; when they introduced the department structure and the credit system, they did it in their interior, while resisting disciplinary unification with other careers and discipline-based departments and institutes; the chair system disappeared, but was often replaced by oligarchies of full professors; they resisted the introduction of full time employment, and were slow in establishing their graduate programs. They kept almost everywhere, in short, the dominance of professional over disciplinary identity. The traditional professions' ability to resist occurred part from because the new legislation did not change the

rule, nor the general assumption, that each higher education career was supposed to lead to a nationally valid professional entitlement. As the system expanded, new professions were added to the old ones, each able to get in due time its own legal status and protection: pharmacists, veterinarians, psychologists, librarians, nutritionists, educational supervisors, nurses, journalists, social workers, statisticians, geologists, economists, and so forth. They did not get, however, the institutional and career organization that existed before the 1968 reform, which only survived in the more traditional professions.

In spite of these difficulties, the new legislation led to the creation of discipline-based departments and institutes coming out of the old Faculdades de Filosofia, Ciências e Letras, which became responsible for teaching in the basic cycle, for education of secondary school teachers, and also for graduate education and research. They also took charge of professional education in the "new" or politically weaker professions, alone or in cooperation with other departments. As the teaching load increased, the departments expanded very quickly, often by hiring young teachers without graduate degrees for full-time teaching tasks.

Graduate education and research expanded dramatically after 1968, in part due to the new legislation, but also because of the presence of new governmental agencies working in the field of science and technology. The 1968 legislation required graduate degrees for career advancement in the universities, generating a strong and sudden demand for graduate studies. In the meantime, the National Development Bank and other agencies related to the Ministry of Planning (the National Research Council and the Financiadora de Estudos e Projetos - FINEP) started to provide money for new graduate and research programs within and outside the universities. Fellowships were created for studies abroad and for sending university teachers to complete their degrees in other universities in the country; and a sophisticated peer review system for continuous evaluation of all graduate programs was created by the Ministry of Education. The number of graduate students rose rapidly from almost zero in the mid-sixties to about 40 thousand in 1986. The percentage of university teachers with doctoral degrees rose from 6.6% in 1974 to 12.7 in 1987, while those with master degrees went from 9.7 to 21.2 in the same period. The distribution of the better-qualified teachers is very uneven, with a strong concentration in the public universities, on one hand, and on the country's Southeast on the other.

Table 3: University teachers with graduate degrees, 1987.

Region	Type of Institution					(N)
	Federal	State	Municipal	Private	TOTAL	
North	31.2%	14.0%	----	11.9%	27.0%	(3,578)
Northeast	40.3	14.0	0.5	13.4	30.1	(21,933)
Southeast	52.8	67.4	14.2	22.6	37.9	(66,421)
South	46.0	25.7	10.5	15.4	28.2	(22,678)
Center-West	38.45	0.2	0.7	17.1	29.0	(6,618)
Total	45.1	49.6	10.1	20.3	33.9	
(N)	(44,179)	(20,330)	(4,847)	(51,872)	(121,228)	
<b>Source:</b> from Gusso and others, table V.21, p. 254. Data from Serviço de Estatística da Educação e Cultura do Ministério da Educação, Brasília, prepared by Marli I. S. Pinto.						

The end result of these developments is an extremely differentiated system of higher education, which is made particularly difficult to understand because the differences are not formally acknowledged. From the legal point of view, there are only research universities, or institutions evolving toward this model. In practice, there are profound regional inequalities, traditional professional schools, graduate programs with strong research components, low quality undergraduate courses in the "soft" disciplines, a large private sector with evening courses and lax admittance requirements and a few highly prestigious public institutions.

### 3. Governance, administration, finance.

In 1988 Brazil adopted a new Constitution reinstating the unity of its higher education system around the research university model, and granting full academic, financial and administrative autonomy to its universities. The Constitution guaranteed also that public education should remain free of charge, and forbade any kind of public subsidy to the private sector, except for research projects or for "community" institutions (a concept applying to a few universities in the State of Santa Catarina and other Southern regions) Many issues are left unresolved -- the true extent of "autonomy," the regulation of non-university institutions, the role of the Federal and State councils of education, the legal status of universities and professors regarding the civil service, and so forth. The Brazilian Congress was supposed to vote in 1989 an education bill to complement the Constitutional tenets. It is unlikely that the new legislation will be able to solve the problems of governance, administration and finance that became particularly acute at the end

of the 1980's, in a context of extremely high inflation, economic crisis and political mobilization, caused by the country's first presidential election in twenty five years.

One of the most difficult issues to be handled by the new legislation will be that of governance in public universities. Brazilian *faculdades* have been traditionally ruled by their schools' "congregations," or academic senates made up by full professors and token representation from the students and lower rank faculty. Appointments for the main executive positions -- rectors and the schools' directors -- were usually made by the federal or state government from lists produced by the institutions. The 1968 reform strengthened the powers of the rectors' office and the government's control upon them, by requiring a list of six names to be produced by the universities, instead of the traditional three. Political liberalization after 1985 opened the way to pressure from students, teachers and employees' associations toward equal weight in one-man-one-vote elections for executive posts at all levels in the public universities, equal representation in all deliberative bodies, and, after 1988, to the notion that the universities were free to choose their authorities internally, without consulting any kind of external body or public authority. Most public universities adopted these procedures in a way or another, and the government usually appointed the most-voted candidate for rectorship in the lists coming from the universities, keeping therefore the formalities of the law without conflicting with the universities. This practice, however, is already generating tensions in some of the best public institutions, where the senior academic staff finds itself often overwhelmed by the mobilization of students, employees and junior assistants. It is also already clear that university authorities need an external mandate, emanating from the government or from some kind of board of trustees, to be able to handle effectively with internal matters in their own institutions. Brazilian public universities are likely to be governed through some combination of these practices in the future, without a return to strong oligarchic or bureaucratic rule, but also without full prevalence of electoral and corporatist power. Private institutions, universities or not, have no tradition of administrative autonomy vis-a-vis their owners or controlling institutions, and it is unlikely that this picture will be significantly changed by the new legislation.

Another problem is that of evaluation and quality control. The Federal Council of Education is legally responsible for caring for the quality of higher education institutions, as well as for the authorization for the establishment of new universities and isolated courses. In fact, however, appointments to the Council have been often political in nature, and its work has been mostly formal and bureaucratic, with no established mechanism of regular evaluation of the universities and schools under its jurisdiction. Evaluation of graduate education and research, on the other

hand, has been carried on regularly by CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior), an agency within the Ministry of Education concerned with graduate education, research and the upgrading of university teachers. CAPES has developed a fairly reliable data basis on the academic production of the country's graduate courses, and makes extensive use of peer review committees that rates each program from "A" to "E" every two or three years. The ratings are used by CAPES to allocate fellowships to graduate students and to provide other kinds of support to the graduate programs; because of their reputation and reliability, CAPES's evaluations are routinely used by other government and non-government institutions in their dealings with the country's university research and graduate education programs. It seems obvious that a similar evaluation mechanism should be extended to the undergraduate level of education as well, and the Ministry of Education has been stimulating discussions and studies in this direction in the last several years. There are, however, both technical and political difficulties in this extension. Undergraduate education is more multidimensional than graduate education, leading to serious problems of comparison among courses and institutions geared toward different publics and educational goals, even in the same fields of knowledge. Since the quality of many undergraduate courses and institutions is obviously not good, there is strong resistance to any attempts at external evaluation, very often presented as a defense of academic and institutional autonomy. In the absence of a nation-wide evaluation system, several partial initiatives have emerged since the mid-eighties. Some universities have developed their own systems of internal evaluation, which are starting to provide them with decision-making instruments they did not have a few years ago; some professional associations are starting to talk about the introduction of board examinations for diploma holders, as a condition for professional affiliation and peer recognition; and at least one private publisher has started a yearly publication of a guide to the Brazilian universities including a course-by-course rating of university education in all fields of knowledge, aimed to the would-be student and their families.

Regardless of the legislators' intentions, sector differentiation will continue and increase in the near future. Besides the known differences between the public and the private sectors, regional initiatives are likely to grow and to find their own solutions to the problems of governance and financing. In 1988 the São Paulo state system, formed by the Universidade de São Paulo, the Universidade de Campinas and the Universidade Estadual de São Paulo, was granted full administrative and financial autonomy vis-a-vis the State government, and a fixed percentage of the state main excise tax for their expenses. The state council of rectors was to take the responsibility for the distribution of resources among the universities, and also for the definition

of salary levels. This decision freed the state government from the constant pressures for salary increases for teachers and administrative personnel, and placed them fully in the rectors' hands; and it placed also a limit on the percentage of the state's budget that can be allocated to higher education. The assumption seems to be that the university sector has grown as much as it could regarding the other educational levels, and that further growth can only be obtained when the state economy grows, or through access to contract research and other forms of loans and donations, since tuition cannot be charged. As the state universities adjust to the new situation, they will be the first public universities in Brazil to face the possibilities and dilemmas of extended autonomy. Another significant regional experience is that of the southern State of Santa Catarina, which developed a network of small community universities throughout the state's territory. This pattern partially comes from fact that Santa Catarina is a small state with multiple urban centers, modern agriculture and industries and a fairly highly educated population, which could not count either with federal nor state resources to attend to their educational needs. The state's community universities and schools are run by a combination of local authorities, business groups and the Church. They are entitled to charge tuition, but these costs are covered with fellowships from local business firms; and they can also receive federal support, since they are not considered "private" by the country's Constitution.

Public resources for higher education in Brazil have grown steadily until the early eighties, and then stabilized, with abrupt variations from one year to another due to the high inflation rates and general economic depression. Brazilian public universities have been traditionally free of charge, and fully maintained by the federal or state governments. Most of the money goes toward salaries, which take 80 to 90% of current expenses. Salary levels and privileges for professors and administrative employees in the public sector have been defined thorough bargaining between the government and the teachers and employees' association, leaving little latitude for the universities' internal decisions on salary levels, promotion rules and alternate allocation of salary money. Resource allocations are supposed to be done once a year in the federal and state budgets. However, high inflation has required many ad-hoc decisions on budgetary supplements, leading to uncertainty about the future and deteriorating conditions. Money for research, student fellowships and out of the ordinary projects has to be sought outside the regular budget. The National Research Council, the Financiadora de Estudos e Projetos and São Paulo's Fundação de Amparo à Pesquisa are the usual sources of support for university research, while student fellowships for graduate studies also can be obtained from CAPES, an agency within the Ministry of Education. Besides, universities can establish cooperative agreements with public

corporations and some branches of the government, and also with the private sector. Foreign foundations and intergovernmental organizations are also available. Some departments in some universities have become extremely skillful in tapping these external sources.

Tuition can be charged in the private sector, but, because of the usually lower social origin of its students, it cannot go too high, and is often controlled by the government. The alternative is for the private sector to provide the cheapest possible type of education for the largest possible number of students. One strategy has been to concentrate in fields not requiring expensive equipment and teaching materials; another has been to hire only part-time teachers, which are sometimes full-time professors in a public institution nearby. A third strategy is to press for public subsidy, which was never very high, and was strongly limited by the 1988 Constitution. The only major kind of public support for the private sector has been a system of student loans, which in 1988 helped about 200 thousand students, about one fourth of the total in the private sector.

#### **4. Faculty and students: Teaching, Learning, and Research**

Institutional and sectorial diversification in Brazilian higher education led to profound differences in the teaching and research staff, as well as in the quality of educational experiences the students receive. We can summarize these differences as follows.

At the top, there is a small elite of about 14,000 faculty with doctoral degrees or equivalent titles and about 40,000 students in M.A. and Ph.D. programs in the best public universities, mostly in the southern part of the country. Professors are endowed with reasonable salaries and can complement them with fellowships, research money and better working conditions (in spite of declining resources in the eighties); graduate students are selected among the best coming from public universities, do not pay tuition and get a fellowship for two or more years.

The middle strata is made by about 45 thousand teachers in public universities without academic degrees and relatively low academic status attending about 450 thousand undergraduate students. Many are active in their professions outside the universities, and teach only part time. A large portion of them, however, is part of the new breed of full-time teachers hired after the 1968, very often on a provisional basis, with the expectation that they would eventually get their academic degrees. They are all mostly tenured now despite their academic achievements, and in most universities can be promoted up to the assistant professor level by seniority. Courses and facilities at this level are uneven, with the best in the Center-South and in the traditional professions, and the worse in public universities of the Northeast. Students in public universities

have access to almost free restaurants and a few other facilities, but lodging is very unusual, and physical installations, laboratories, research materials and teaching aids are scarce. Students usually come from the best, private secondary schools (which means middle to high-class families) and often go through cramming courses to prepare for the university's entrance examinations (there are private, profit-oriented courses outside any kind of government supervision, and tend to be efficient in their purpose). As the educational system expands, these students are faced with increasingly serious problems of unemployment, in spite of the relative quality of their education.

Finally, at the bottom, there are around 60 thousand teachers serving about 600 thousand students in private institutions. Most of these teachers work part time, are not well qualified, and have to accumulate a large teaching load in several institutions - or a combination of jobs - in order to survive. Some have full-time appointments in public universities, and moonlight in private schools where courses are usually given in the evening. They are not organized, and do not reproduce the teacher's associations that prevail in the public sector. Tuition is low and government-controlled; however, the students can barely afford them. Facilities and teaching materials are minimal or non-existent. Students tend to be poorer and older; courses are mostly in the "soft" fields. Most students are already employed in lower middle class or white collar jobs, and look for education as a means for job improvement or promotion; they are usually more interested in credentials than on knowledge for its own sake.

These differences combine with profound regional imbalances and contrasts between the southern states, and more specifically the state of São Paulo, and the rest of the country. São Paulo is Brazil's biggest and more industrialized state, encompassing about one fifth of its population, and one third of its graduate enrollment. This is also the region where the dual nature of the Brazilian higher education developed more fully. There is proportionally less enrollment in universities than in other regions, but the universities are far better than in the rest of the country, while the private sector is much more complex and differentiated than elsewhere. There are few federal institutions in the state, which contrasts with the country's poorest region, the Northeast, where more than 70% of the students are enrolled in federal universities, with few alternatives in the private sector.

Career paths vary greatly throughout this diversified system. At the Universidade de São Paulo a doctors' degree became recently the minimum requisite for admittance to the academic career; in other public universities, a graduate degree is not an absolute requisite for first level entrance. Regular appointments are made after elaborate and formalized written examinations, including



written exams, public lecture and evaluation of the candidate's curricula. Promotion to the higher ranks - to associate and full professorship - also require similar procedures. Many Brazilian universities still accept the institution of "livre docente" - an adaptation of the old German *privatdozent*, which in practice is obtained through public examination and the presentation of an academic dissertation, and assures an academic status immediately below full professorship. In the past, "livre docência" was a mechanism to assure academic quality; today, it is most often a mechanism to avoid the doctors' degree requirement for admission and promotion, except again at the Universidade de São Paulo, where the *livre docência* remains a required step in the path toward full professorship.

Once admitted at any level, tenure is assured in practice except for extreme cases of misbehavior. Brazilian public universities are part of the civil service, and, in the past, professors were hired as civil servants, which meant, among other things, employment stability after a few years and retirement with full salary after twenty-five (for women) and thirty years (for men). In the last several years the federal universities begun to hire according to the labor legislation for the private sector, where people can be fired at any time at one months' notice and retirement benefits are very limited. These differences, however, have been narrowed due to the professor unions' pressures. In the private sector, on the other hand, the rule is the absence of career structures and tenure mechanisms. Professors are hired as teachers when needed, and usually dismissed at will.

The rigidity and formality of appointment and promotion procedures in the public sector have led to the introduction of alternate mechanisms. The University of São Paulo, for instance, can appoint professors by invitation for limited periods; however, their admittance to the regular career requires a formal examination. In the past, and mostly so in the federal universities, similar mechanisms have led to the admittance of large number of people who were later granted the rights of stability and career promotion through ministerial decrees or judiciary decisions. One consequence has been the low academic level of many institutions; the other is their inability to hire new and supposedly more qualified personnel, for lack of academic slots. Another feature of this system is that mobility between universities is almost nonexistent, since jobs and ranks are not transferable between institutions, even within the same system.

Academic power within Brazilian universities is usually in the hands of academic units (schools, "faculties," institutes), within the limits set by the government, on one hand, and the professors' and employees' associations and unions, on the other. Curricula for the legally recognized professions and careers are established by the Federal Council of Education, and can only be

expanded or interpreted locally. Universities are free, however, to establish new courses and careers, and have no limitations regarding their graduate programs, except the periodical evaluation from CAPES. Departments are also responsible for the examinations for appointments and profession. Non-university institutions, even in the private sector, can only be created or offer new degrees with the formal authorization of the Federal Council of Education. The government has the power to establish salary levels and the availability of slots in the public sector, and also tuition prices and salary levels in the private institutions.

Academic power in the public sector is also exerted by the universities' teacher associations, which are nationally organized (as the Associação Nacional de Docentes do Ensino Superior, ANDES) and affiliated with the country's more militant central union, the Central Unica dos Trabalhadores (CUT). ANDES' militancy in the 1980's has been instrumental in assuring the salary levels and job stability of university professors, but also to paralyze the governments' initiatives in terms of university reform. It has also led to the rigidity of rules and procedures of the public universities in matters of academic careers, placing therefore a clear limit to the universities' formal autonomy. The employees' associations are a relatively new phenomenon in Brazilian universities, and have followed a general pattern of political and union organization of Brazilian civil servants. These associations have been active in several strikes at the federal and state levels, and participate wherever direct elections for executive offices in public universities are held.

Political mobilization of Brazilian students in the late 1980's is much less salient than it was in the sixties and seventies. The National Union of Students, UNE, was organized in the early 1940's, and played an important role in the popular manifestations leading to Brazil's entrance in the War against the Axis. In the fifties and sixties UNE was at the forefront in all libertarian and nationalist campaigns, culminating in the large public demonstrations against the military regime in 1968. Many student leaders were killed by political repression or went into exile in the early seventies. Later, as the students' ranks swelled and lost the memory of the past, many of those active in the sixties joined the teachers' association movements of the eighties, while the new students entered a period of political indifference not very different from what can be found in so many other Western societies.

## **5. Conclusions**

The challenge of Brazilian higher education for the turn of the millennium is whether it will be able to accommodate the country's growing educational demands while fulfilling its role as

centers for academic excellence and scientific research. The current situation, in which better quality education is provided free in the public sector, while low quality, mass schooling is only available privately, is not likely to last. In the next decades, the public sector is likely to come under increasing pressure to broaden its coverage, and it will either do it while keeping its remaining standards of quality, or leave this task to the private sector. The educational role to be fulfilled by Brazilian universities in the future is not limited to their current or prospective students. Basic and secondary education in Brazil today is plagued by an acute lack of qualified teachers, and it is not clear how the universities can recover their traditional role of teacher education, given the low prestige of the teaching profession and the poor educational background of those willing to join its ranks. The universities will have also to play a growing role in the continuous education for all professions, and in providing non-conventional courses for those who want to learn more but are unable to attend to the regular courses given along the traditional curricula.

These challenges will have to be met in a context of economic constraints. The Brazilian state is not likely to increase the universities' share of the national budget in the near future, nor its share of educational expenses vis-a-vis other educational levels. Pressures for evaluation, administrative efficiency and accountability are likely to increase, together with a growing movement toward new sources of income, including cost recovery from the better endowed students. The full administrative, patrimonial and academic autonomy granted to the Brazilian universities by the 1988 Constitution could become a precious instrument in this search of a broader and more diversified role, and a larger and more equitable financial basis. On the other hand, autonomy can provide also more traditional and shortsighted sectors within the universities with a weapon for retrenchment, isolation and resistance to the realities of the external world. This is the dilemma for the future.

## References

- Azevedo, Fernando de: 1963, *A cultura brasileira*, Brasília, Editora da Universidade de Brasília, 4th edition (first edition 1940).
- Barros, R. S. Maciel de: 1959, *A ilustração brasileira e a idéia de universidade*, São Paulo, Universidade de São Paulo, Faculdade de Filosofia, Ciências e Letras (new edition: São Paulo, ed. Convívio and EDUSP, 1987).
- Carvalho, J. Murilo: 1978, *A Escola de Minas de Ouro Preto -- o peso da glória*, Rio de Janeiro and São Paulo, Cia. Editora Nacional and FINEP.
- Cidade, Hernani, 1969 - "A reforma pombalina da instrução" in *Lições de cultura e literatura*

- portuguesa*, Coimbra, Coimbra Editora, 2 volumes.
- Costa, Emília Viotti, "Brazil: The Age of Reform, 1870-1889", in Leslie Bethel, ed., *The Cambridge History of Latin America*, Vol. 5, Cambridge University Press, 1986, 728-778.
- Cunha, Luís Antônio, *A Universidade Temporã: o ensino superior da colônia à era de Vargas*, Rio de Janeiro, Civilização Brasileira, 1980
- Cunha, Luís Antônio, R. da, *A Universidade Crítica: O Ensino Superior na República Populista*, Rio de Janeiro, Francisco Alves, 1983.
- Dean, Warren, "The Brazilian Economy, 1870-1930", in Leslie Bethel, ed., *The Cambridge History of Latin America*, Vol. 5, Cambridge University Press, 1986, 685-724.
- Fausto, Boris, "Brazil: the social and political structure of the First Republic, 1889-1930", in Leslie Bethel, ed., *The Cambridge History of Latin America*, Vol. 5, Cambridge University Press, 1986, 779-830.
- Furtado, Celso: 1968, *The Economic Growth of Brazil - A Survey from Colonial to Modern Times*, Berkeley, University of California Press.
- Gusso, Divonzir A., Tramontin, Raulino and Braga, Ronald, 1987 - "Ensino Superior", in IPEA-IPLAN-SEC, *Educação e Cultura 1987 - Situação e Políticas Governamentais*, Brasília, Secretaria de Planejamento, Instituto de Planificação Econômica e Social - IPEA.
- Levy, Daniel C., *Higher Education and the State in Latin America - Private Challenges to Public Dominance*, The University of Chicago Press, 1986.
- Oliveira, Betty A., *As Reformas Pombalinas e a educação no Brasil*, São Carlos, Universidade Federal de São Carlos, 1973.
- Paim, Antônio (editor), *Pombal e a Cultura Brasileira*, Rio de Janeiro, Tempo Brasileiro, 1982.
- Prado Jr., Caio: 1967, *The Colonial Background of Modern Brazil*, Berkeley, University of California Press.
- Schwartzman, Simon: 1978, "Struggling to be Born: the Scientific Community in Brazil", *Minerva* 16, 4 (Winter), 545-580.
- Schwartzman, Simon, Bomeny, Helena M. Bousquet, and Costa, Vanda M. Ribeiro: 1984, *Tempos de Capanema*, Rio de Janeiro and São Paulo, Ed. Paz e Terra and Editora da Universidade de São Paulo.
- Schwartzman, Simon: 1979, *Formação da comunidade científica no Brasil*, São Paulo and Rio de Janeiro, Companhia Editora Nacional and Financiadora de Estudos e Projetos.
- Schwartzman, Simon: 1988: "Brazil: Opportunity and Crisis in Higher Education", *Higher Education*, 17, 1, 99-119.

- Stepan, Nancy: 1976, *Beginnings of Brazilian Science -- Oswaldo Cruz, Medical Research and Policy, 1890-1920*, New York, Science History Publications.
- Wirth, John D.: 1970, *The Politics of Brazilian Development, 1930/54*, Stanford, Stanford University Press.
- Withaker, A. (ed): 1961, *Latin America and the Enlightenment*, New York, Cornell University Press.